DESCRIPTIONS OF FOUR NEW SPECIES OF AMPHIPO-DOUS CRUSTACEA FROM THE GULF OF MEXICO.

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The species here described form a small part of a collection of amphipods from the Gulf of Mexico which was sent to the author for study by the United States National Museum. As lack of time prevents the completion of a full report in the near future, it is thought best to publish now the new forms already discovered.

The type specimens are in the United States National Museum.

AMPELISCA HOLMESII, new species.

Cephalon about equal to first 3 segments of mesosome, tapering anteriorly, truncated, first coxal plate slightly expanded distally, broader than second, about same width as third, fourth plate deeper than broad, lower edge much shorter than posterior margin. Last ephimeral plate of metasome produced at posterior ventral corner, bisinuate; both the process and lobe are less pronounced than in A. macrocephala Lillieborg. First segment of wrosome with a slight dorsal transverse depression and behind it a low carina (more distinct in male) with a slight projecting angle. Corneal lenses small but distinct, lower pair occupying inferior corners of cephalon. First antennæ about the length of the cephalon, reaching only slightly beyond the tip of the second segment of the peduncle of the second pair, those of the male reaching almost to tip of third segment, flagellum 8-segmented. Second antennæ in female scarcely half the length of body, third joint of peduncle shorter than second. Gnathopoda slender, propodus in first about the length of the carpus and slightly tapering distally, that of the second about half as long as the carpus and slender. Dactylus of first two peræopoda much longer than two preceding segments combined. Last pair of percopoda with the basal joint almost as long as remainder of leg. posterior expansion broad and rounded at the tip, with 7 spines on outer surface; propodus tapering and almost equal to two preceding segments combined; dactyl slightly longer than propodus. Last pair of uropoda with rami broadly lanceolate. Uropoda 2, outer ramus somewhat shorter than inner, long spine near tip. Telson, lobes tapering,

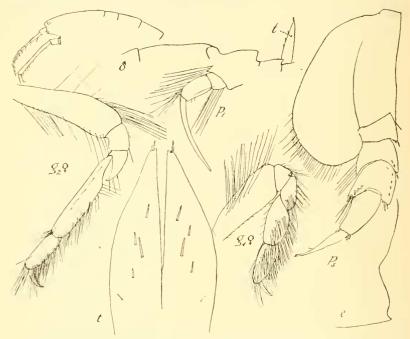


Fig. 1.—Ampelisca holmesh. t, last epimeral plate of metasome; g_1 , first gnathopod of female; g_2 , second gnathopod of female; p_1 , first peræopod; p_5 , fifth peræopod; t, telson.

tip blunt, armed with two spines, four pairs of dorsal spines arranged in a sinuous line.

Length, female, 11 mm.

Abundant in a collection from Ferguson's Pass, Oyster Bay. Florida.

Type.—Cat. No. 7502, U.S.N.M. Named for Prof. S. J. Holmes.

HAUSTORIUS AMERICANUS, new species.

Body tumid. First antenna, flagellum 7-jointed, the tips of the 6 distal joints bearing calceoli, accessory flagellum one-jointed, second antenna little longer than first antenna, flagellum 7-jointed. Mandible, palp large, middle joint longer than others. Second gnathopod about as stout as first gnathopod, fifth joint of second gnathopod armed with calceoli on its posterior distal margin. Third uropod,

rami both one-segmented. Telson twice as broad as long, cleft shallow, distal row of long spines and two dorsal lateral spines.

Length, 8.2 mm.

A single specimen collected by L. R. Cary at Cameron, Louisiana. Type.—Cat. No. 38340, U.S.N.M.

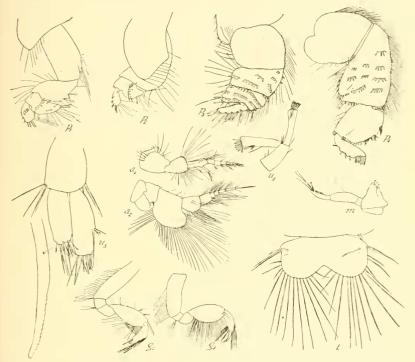


Fig. 2.—Haustorius americanus. a_1 , first antenna; a_2 , second antenna; g_1 , first gnathopod; g_2 , second gnathopod; m, mandible; p_1 , first peræopod; p_2 , second peræopod; p_3 , third peræopod; p_4 , fourth peræopod; t_4 , telson; t_4 , first uropod: t_5 , third uropod.

MÆRA RATHBUNÆ, new species.

Body slender, smooth. Head, lateral lobes rounded. First side plate produced anteriorly into an acute process; third rounded; second and fourth truncate. Third pleonic segment, postero-lateral corners slightly produced, hind margin slightly crenate. Eyes narrow elliptical. First antenna, second joint of peduncle a little longer than first; third short, flagellum as long as peduncle, 27-jointed, accessory flagellum 10-jointed. Second antenna, peduncle slightly shorter than that of first antenna, flagellum subequal to ultimate joint of peduncle. Second gnathopod, fifth joint longer than sixth, palm straight, oblique, hind margin convex, setose. Second gnathopod, much larger, fourth joint produced into an acute process, fifth more than twice as wide as long, palm with a tooth at its outer angle and a

shallow notch at each end, denticulate. Third to fifth perceopods, second joint well expanded, oval, with free corner, fifth perceopod subequal to fourth. Third uropod slightly longer than others, pe-

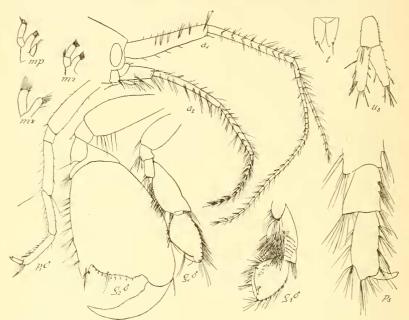


Fig. 3.—M.era rathbune. a_1 , first antenna; a_2 , second antenna; g_1 , first gnathopod of male; g_2 , second gnathopod of male; mp, maxilliped; mx, maxilla: p_1 , first peræopod of male; p_3 , fifth peræopod; t, telson; u_3 , third uropod.

duncle short, rami equal, truncate. Telson cleft to base, a deep notch just outside the apex of each side from which a seta projects.

Length, 13 mm.

Distribution.—Gulf Stream, off Key West, Florida, 98 fathoms, February 14, 1902, Station 7279, U. S. Bureau of Fisheries, steamer Fish Hawk; also 122 fathoms, February 26, 1902, Station 7296.

Type.—Cat. No. 38341, U. S. N. M.

Named for Miss Mary J. Rathbun.

PROTELLOPSIS STEBBINGII, new species.

Head, bearing two acute spines above. First segment of percon longer than head, third segment with two blunt dorsal spines at middle, fourth segment with two slight dorsal elevations at center; first four segments rugose above; second, third, and fourth bear large rugose lamelle at their anterior ventral angles; fifth segment longest; third longer than fourth, fourth longer than second, sixth much longer than seventh, fifth almost twice as long as sixth and seventh together. Eyes rounded or slightly oval. First antennæ

twice as long as second, first joint shorter than head and first segment of person; first segment half as long as second, third two-thirds as long as first; flagellum longer than peduncle, 14-segmented. Second antenna more slender than first, third segment twice as long as first two; flagellum 2-jointed, penultimate twice the length of ultimate joint. Mandibles, with two plates, each bearing 5 teeth,

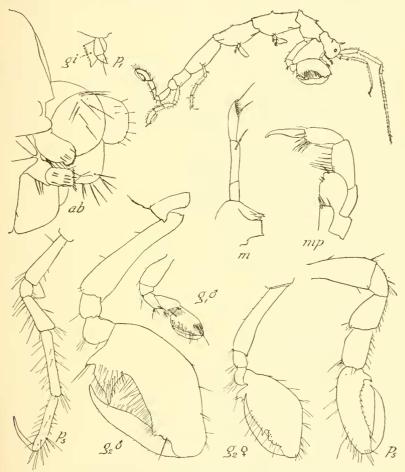


Fig. 4.—Protellopsis stebbingh. ab, abdomen; gi, gill; g_1 , first gnathopod of male; g_2 , second gnathopod of male; g_2 , second gnathopod of female: m, mandible; mp, maxilliped; p_1 , first peræopod; p_3 , third peræopod; p_5 , fifth peræopod.

prominent molar tubercle with strongly denticulate crown. Maxillipeds, with inner prismatic plate very small, bearing 2 small teeth and 4 apical spines; outer plate almost three times as long as inner, bearing 1 apical spine and 2 others near the inner distal margin. First gnathopoda of male, palm lamellate, finely denticulate and armed with many spines. Second gnathopoda with carpus subequal to merus, palm concave with proximal angle greatly

extended into a lamelle which is produced into a spinous process at both angles and has a notch near the proximal angle, dactyl strong and sinuate. Two anterior perapoda, 2-segmented, one-third as long as gill, which is rather slender and elliptical; third perapod much more slender than last two. Terminal segment of first abdominal appendage ending in a conical process, around the base of which are a circle of small acute spines. Second abdominal appendage blunt and spinose at tip.

Length, 11 mm.

Female with dorsal spines much less prominent. Second gnathopod with a notch in the center of the palm and just behind this a spinous process.

This species was abundant in the Gulf of Mexico, off Northwest Channel, February 24, 1902, Station 7292, U. S. Bureau of Fisheries,

steamer $Fish\ Hawk,\ 10\frac{1}{4}$ fathoms.

Type.—Cat. No. 38342, U.S.N.M. Named in honor of the Rev. T. R. R. Stebbing.